

No 5. ~~1816~~

#2

A Dissertation
upon
The disease denominated Typhus fever

By John W. Jenkins of N. Jersey

printed March 7th 1816

~~1790~~

By John W. Foster & Company
Superior Clerk of Court
1790

It is proposed, in the following Dissertation to give
a concise description, of the disease called Typhus fever,
as it occurred in the year eighteen hundred and fifteen,
in the village and neighbourhood of Newton in the
County of Bucks. Feeling conscious of my inability
to do it with scientific precision; but confiding
in the candour and generosity of examining com-
-mittees, who are well aware of the disadvantages,
under which, a young man, who has, just embarked
in the science of medicine, must necessarily lab-
-our; I feel satisfied they will make every
proper allowance, for the imperfection of the
performance.

The disease of which we are about to speak,
made its first appearance in the United States,
in the year 1806; in the State of Massachusetts;
travelling thence towards the South; it has since
prevailed, at different times, and in various places,
- through the middle States with peculiar
malignity; proving fatal to numbers of the
inhabitant in some neighbourhoods; whilst in
others, it was comparatively mild and more man-
-ageable. The last season, it appears to have been
- visited with great violence in some parts of
Virginia;

During which, it likewise occurred at Doylestown and
Buckingham, in Pennsylvania; and in Newton
and Hackensack in the State of New Jersey. No
situation, however healthy, appears to be exempt
from its ravages: nor no class of citizens, what-
-ever their occupation, or manner of life may be,
are secure from its attacks. Otherwise Newtown
should be exempt, for there is not perhaps a
more healthy situation, in the county of Bucks.
The surrounding country is highly cultivated,
and the inhabitants are most of them, industri-
-ous farmers; temperate, and in easy circumstan-
ces; consequently exempt from many of the cau-
-ses of disease to which the luxurious and the very
poor are exposed. There was nothing peculiar
in the season of the year 1814, when the disease
made its first appearance; except the winter
was perhaps, more mild and open, than usual:
there were several falls of snow, which did not
commonly lay more than two or three days, before
they were swept off by rain. The disease commen-
-ced its career with great violence the last of win-
-ter, and continued to infest the neighbourhood,
until the middle of spring; with degrees of inve-

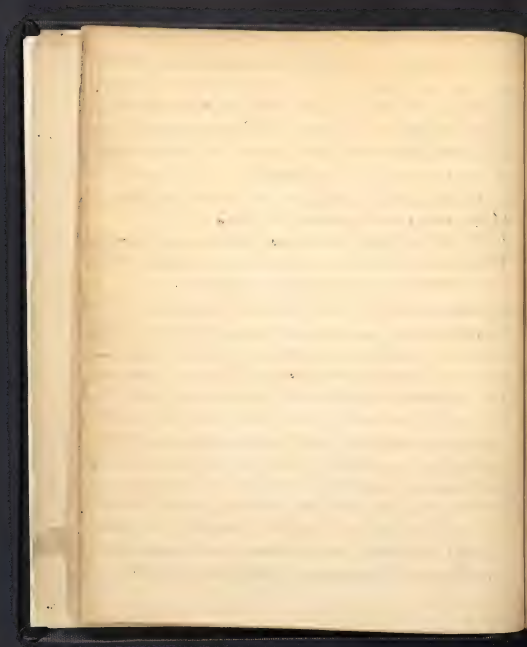
invariably, as varied as the persons, who were
attacked, and the periods at which it occurred.
Some were seized with extreme debility, at the commen-
cement, so as not to be able to help themselves; others
were first attacked with blindness, and insensibility
of the surface of the body, coldness of the extremities,
and different grades of delirium; many were warn-
ed of its approach, by dizziness, tremor, and dull
pain in various parts of the body; and in some
it put on the more insidious, but not less fatal
garb of hysteria and catarrh. But as the warm
weather advanced, it gradually subsided; and dur-
ing the summer entirely disappeared. It however
reappeared in the autumn, a few sporadic cases
occurred, and diseases generally, were less inflamma-
tory, than they usually are, at that season: particu-
larly in the months of November and December;
during which the weather was changeable, and wet.

The winter of eighteen-hundred and fifteen, was
extremely ~~late~~, the ground was covered with snow
from the middle of January, until the seventh or
eighth of March. About the twenty-fifth of Janu-
ary the disease made its appearance in Doylstown
and Buckingham, with its characteristic malignity.

^N
Not more than one eighth or tenth of those who
were attacked, when it first appeared recovered.
On the tenth of February, it was again abundant
at Newtown; but it was much less fatal, and
perhaps less violent, than in the above-mention-
ed places. It was principally confined to females
out of seventeen persons, who were labouring
under the disease at one time, only two were males.
This disposition to attack females continued dur-
ing its prevalence; those who were pregnant
were the least subject to it, but two cases were
observed during its existence. The manner of
attack was very various; but generally less
violent, than it was the preceding year. Though
some were seized with the most unreasonable
delirium; yet it more commonly came on, with
coma, pain in the loins, extremities, sides and head,
chills were common, and in some it made its first
appearance, by nausea and vomiting of a bilious
matter, accompanied with cold extremi-
ties. These are most of the leading symptoms,
that occurred in the different persons, who were
attacked by this new and formidable enemy.
For many of the preceding and most of the

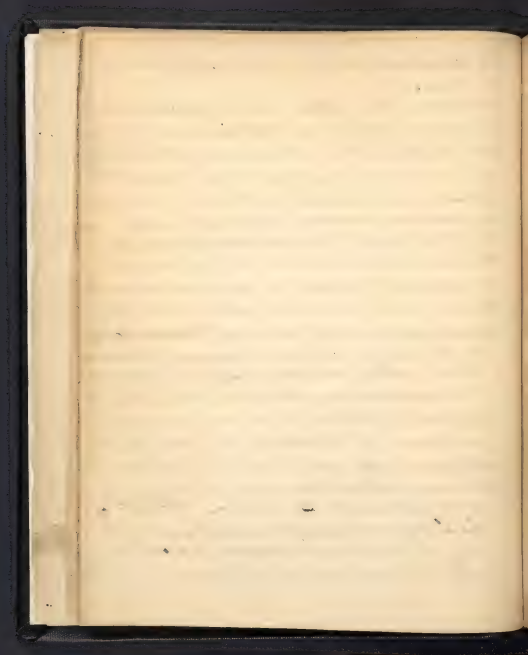
Intercourse, sleep, dreams and observations upon the dis-
eases, & more as known to me, will be added to the atten-
tion and judgments of my reception. Dr. P. Jinks, who
surgeoned me with a set of notes. Having given this brief
view of the symptoms, that indicate the approach of
the disease; we shall now proceed to give a more
particular detail of them, as they occurred in the
assimilating and relative functions
of the assimilating functions - namely, when are
Comprehension, Digestion, Absorption, Circulation,
Respiration, in secretion and excretion.

Digestion. This function was generally much im-
paired, the tongue was dry and covered with a muddy
white or yellow crust, often of a dark colour on
darker hair; and sometimes of a fiery red colour.
The appetite was diminished or entirely gone; the
nervous and vomiting, were often distressing, and
commonly attended with some discharge of bile;
which was sometimes of a dark or green colour,
but more frequently natural. The intestines
were usually, but little affected, a few cases
occurred, in which a slight Diarrhoea was ob-
served; but they were seldom if ever attacked
with pain, sometimes slightly constipated.



The Absorbents did not appear to partake in the disease

The sanguiferous system. In most cases the heart and arteries, at the access of the disease, were increased greatly in frequency and slightly in tone - 1. the pulse was often irregular and appeared to discover some weakness; but this was not universal, for it was sometimes diminished in force from the commencement of the disease: and even in those cases where it discovered the highest degree of inflammatory action, it would not admit of the least direct abstraction, without inducing a dangerous degree of debility. Hemorrhage from the Lungs was not uncommon, few cases occurred, in which there was not, ^{at} some period of the disease, discharge of blood from them: frequently about the third or fourth day, sometimes earlier. The Breathing, was often difficult and usually attended on the first two or three days, with a short dry cough, which was very troublesome to the patient. The heat of the body was somewhat increased on the first days of the disease, but was most frequently of short duration, and usually attended by a cold



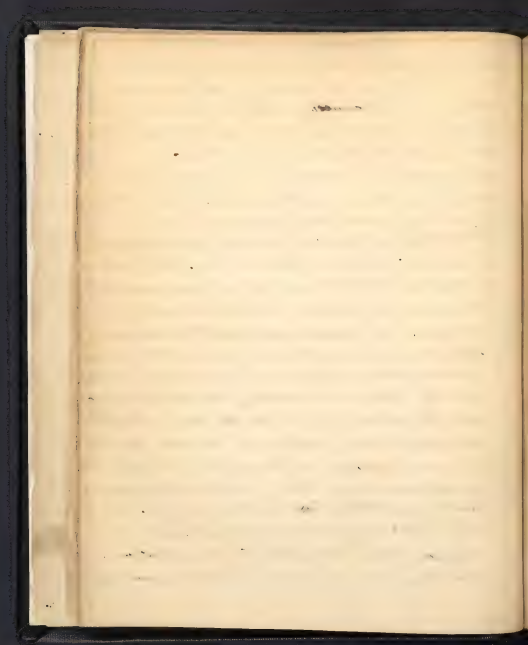
Some patients during the most anxious and
the inspiration as the disease increased not very much
- into a more *extremely* laborious breathing, great
anxiety and dejection; which was strikingly de-
clared in the countenance of the patient.

The respiration and circulation the motions and secre-
tory organs were very little affected, even in the
latter part of the disease was sometimes complained of,
but probably, was more frequently the consequence
of activity, than of increased action. There appeared
- to be a redundancy of bile in some cases, but
it was, as has been before observed, commonly

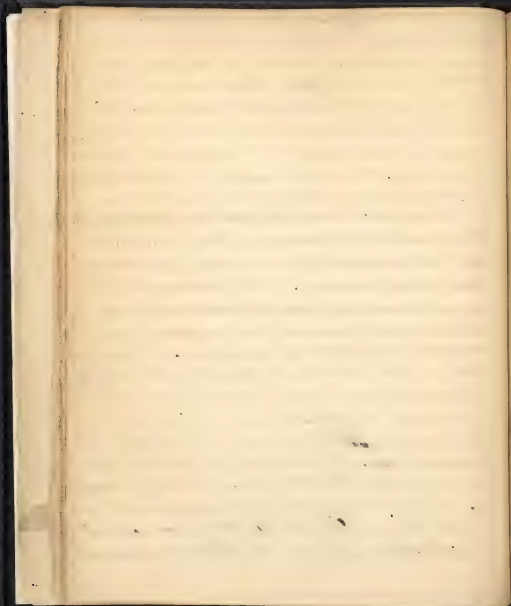
natural. The kidneys were enlarged, but seldom
affected with pain; the urine was secreted in small
quantity, and in some cases high coloured, but more
usually natural. Sweating was not so common
as in the preceding year, neither was it attended
with as salutary an effect; it however some-
- times occurred, and was accompanied with such
an offensive smell, that it rendered the patients
loathsome to themselves and their friends.

The Relative functions. Under this head are
comprised the senses and volitional motion.

The Brain was frequently very much disordered,



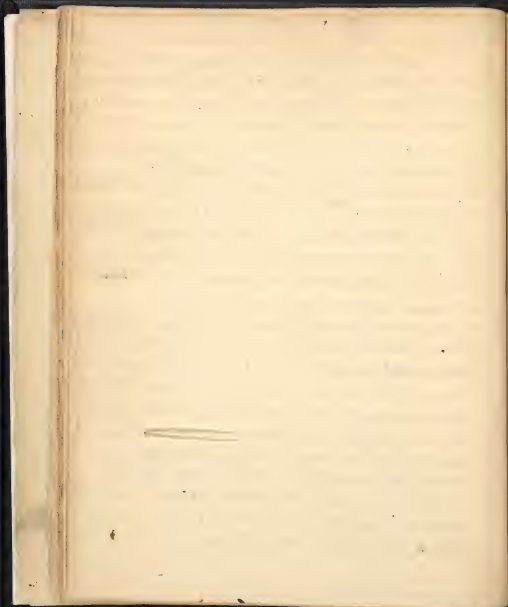
and its motions in all various cases, were carried on with difficulty. A violent ambition frequently occurred, during which the patients would incessantly, and even with ill success, insisted to dress well. This was almost an universal, and sometimes a violent symptom; but generally it ceased on the third or fourth day. It tended to exhaust the patients strength, and bring on an almost unconquerable degree of debility; and it often thwarted the expectations of their friends, and the designs of their physicians, as it not unfrequently, was extremely difficult to get them to take medicine. A low muttering delirium occurred in some cases, when the patient would lay apparently, in a comatose state, muttering at intervals and uttering incoherent expressions. The eyes were often red and inflamed, sometimes they had a muddy appearance, and in many instances had lost their accustomed sensibility. The hearing this season was but little impaired, though deafness the preceding year was common. The functions of the olfactory were undisturbed. The taste was considerably deranged, as might be expected from the above mentioned state of the tongue. The sense of feeling was so much obtunded in many cases, that the patients appeared

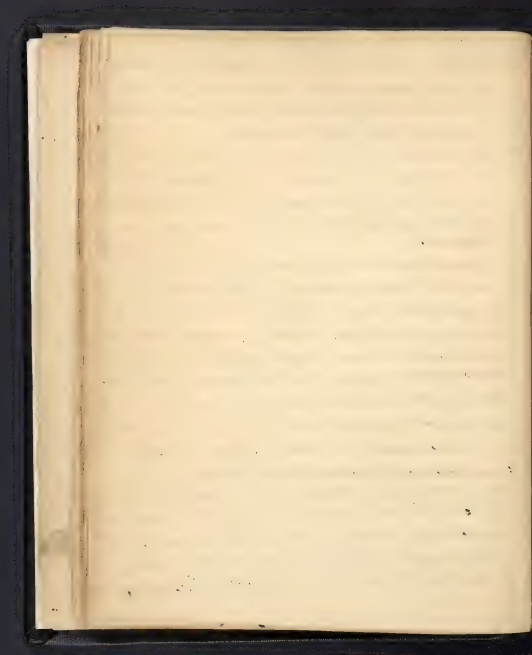


to have lost almost entirely, their connexion with some
secondary subjects through that medium. The insensibi-
lity in some cases was so great, that Sisters and sin-
gle beams did not excite any unpleasant sensation.

Though the patient was insensible to external
irritation, and that another person could have
been standing by it was sensibility that pain,
which was the consequence of the disease in the back,
thigh, and breast it ^{was} felt in the arms, and in the head,
it was so severe, shooting from one temple to the
other that the patients, in many cases, were induced
to believe, some person was bending their heads
with ~~force~~ pointed instrument.

The voluntary muscles were often called into ac-
-tion, as was kindred motion when speaking or
thinking. The strength was so much increased, that
it was difficult managing the patient. This
however was of short duration, for the muscu-
lar strength in most cases, ^{was}
speedily exhausted, and then became extremely
weak and unable to do themselves. At this
period, the action of the muscles not con-
tinually became irregular, spasmodic contractions of
the arms were seen, jerks, twinnings of the eye lids

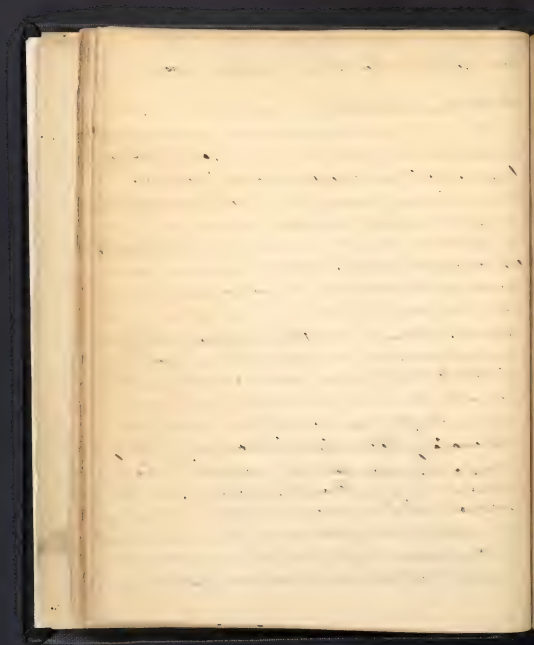




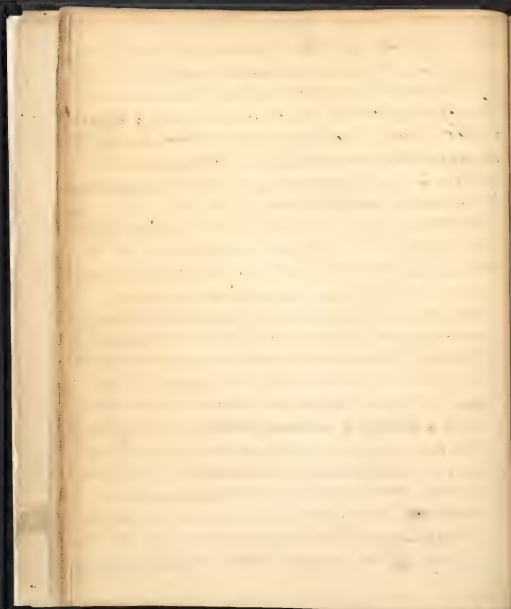
them, for the method of cure is similar in each

The results were opposite to a summer in ascending air, in which, in the first instance, as has been already observed, that will induce us to account for it; nor nothing that will serve as a guide to our inquiries.

Yet from the circumstance of the disease, prevailing so generally, even in the neighbourhood, and from its more frequent, so many persons at the same times, it appears somewhat probable, that there was some cause, however subtle, existing in the atmosphere at the particular seasons and places in which it has occurred. Although I must acknowledge myself ignorant of that cause, not having had an opportunity of ascertaining by a local experiment, the composition of the air at the time in which the disease appeared; yet I can not help being struck with the analogy that subsists between many of the symptoms of this disease, and that, produced by inhaling carbonic acid gas. From this analogy, from the seasons at which it appeared, and from the state of the weather during those seasons, which was unusually mild and open; might it not, with some reason, be inferred that this was the cause? Certainly,



when it is recalled, that all these causes, which come
in to favour the decomposition of vegetables, and the
formation of this species of gas, were in full operation.
This together with the usual consumption of oxygen
at that season, by combustion and respiration; and the
consequent formation of carbonic acid, would necessarily
- by have a tendency to contaminate the atmosphere.
'Circulation, that spirit of activity of nature, in which, there
are so many exhalations, consequent to the animal being-
down would not, being then suspended, gives still ear-
- the probability to the hypothesis. The predisposing cause
admitting the miasm to exist in the atmosphere,
whether it be, as I said, to be carbonic acid or any
other one, of the non respirable gases, or a combina-
- tion of them, acting alone or in concert with some
other cause, as grief, anxiety, intemperance of any
kind, or excessive fatigue, may produce a sufficient
degree of debility to predispose the system to the disease.
The exciting causes. They are numerous and vari-
- ous; any substance acting, either chemically, or me-
chanically, upon a system already predisposed may
excite the disease. The same cause may act as a miasm,
predisposing, and exciting, according to the man-
- ifestations of its intensity, sudden transitions from

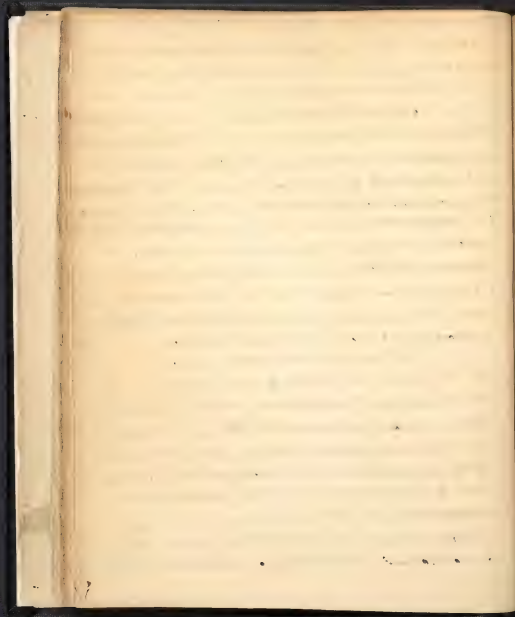


a cold to a warm atmosphere and *vice versa*; loss of rest from any cause, but particularly, from attending on the sick; intemperance, in eating, or drinking, and giving a chase to the passions, often prove exciting causes.

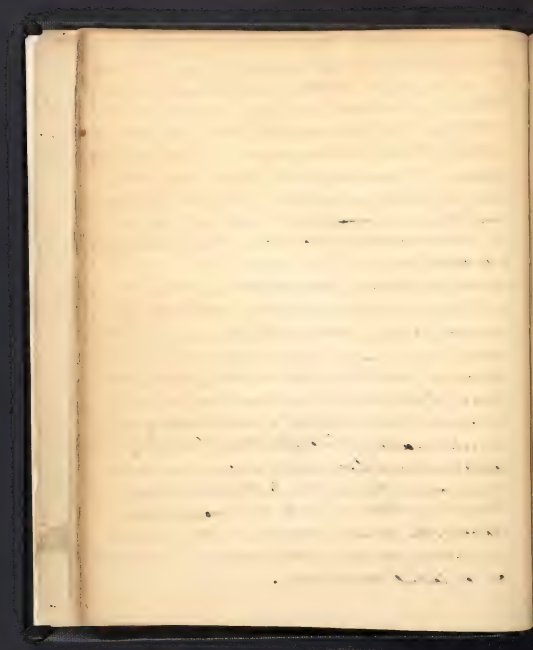
With respect to the proximate cause, I acknowledge myself profoundly ignorant; nevertheless a knowledge of it appears to be of much consequence, to the Physician who prescribes for the state of the system. Which seems to be satisfactorily proven, by the numbers that have existed in the imaginations of different authors. A

lesion in the blood, spasm in the extreme vessels, and a convulsion or irregular action in the arterial system, have successively prevailed, and their different authors, appear to have practised under the guidance of each with success.

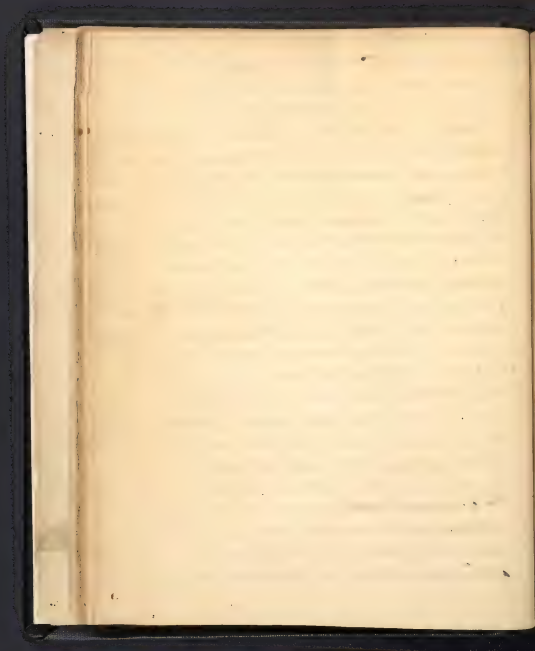
The Prognosis. It is often of some consequence to the character of a physician, that he be able to give a correct opinion of the issue of a disease; as he is not unduly, interrogated by the friends of the sick, concerning its probable termination; and if he should not be able to give them some satisfaction, or if he should, unfortunately give a false judgment, it will often injure him, in their esteem. Therefore it is of importance to observe



attentively the phenomena of diseases, as they tend to life and health, or death; and by attending to the following symptoms, we shall be enabled to form a tolerably correct prognosis of the disease under consideration. When the delirium occurs on the first day of the disease, is not violent, nor the debility very great; when the breathing is not difficult, and the bleeding from the lungs, ~~is not~~ profuse; and when the vomiting is manageable, the tongue not thickly furred nor of a dark colour, and the torpor and insensibility are not very great: by good attention and the proper exhibition of medicines, we may reasonably expect a speedy recovery. But on the other hand, if the delirium occurs, on the third or fourth day of the disease, be violent, and the succeeding debility very great; if the system become torpid and insensible, the tongue thickly furred, of a dark brown or purple colour; and if the difficulty of breathing be considerable and that ghastly or anxious countenances occur, the eye-lids falling over the eyes, half closing them; the pulse of the nose drawn in towards the septum, and low muttering Delirium supervening, we may pretty certainly calculate on a fatal termination.



The vom. often soon slightly expressing the point of the
commencement of the disease, and from the pain in the
stomach was sometimes ~~caused~~ the suspicion would
be raised to putrid bile, although freely, freely; but these
symptoms were occasional, and that prescription universally
incurious, and sometimes fatal. Drawing blood in small
quantities, was likewise adopted, but with no more
effect, and it sometimes proved hurtful, by inducing
an unpleasant and sometimes an alarming degree of
debility. It being observed that a flatulent distension
was rising in many cases, on the use of narcotics,
pain was attended with the suspicion of acid. They after
selected or removed the pain and oppression of the breast,
and never failed to relieve the stomach & from this one
and ascending matter, that might be in it, and the
patient always appeared to be relieved by their opera-
tion. Catharticks were usually found useful; they
also relieved the pain in the side, sometimes palliated
the affection of the mind, and always prepared
the system for the reception of other medicines.
The advantages arising from the exhibition of
sudorifics the preceding year, gave birth to the
hope, that they would be ^{be} beneficial in the case
of the present; and accordingly the first expression



in this instance proved to be a false guide; for they were of little use, and perhaps in some cases injudicious, by causing delay in the exhibition of more efficacious remedies. Blisters and Sinapisms were useful remedies. Blisters were applied to the sides with the happiest effects; they seldom failed to relieve or remove the pain seated in this part. Sinapisms were applied to the feet and ankles, with the effect of removing or mitigating the delirium and coma that occurred. The nurses and friends of the sick, became so well acquainted with this fact, that they often resorted to the use of them without the advice of the physician.

Although the above remedies, in many cases would be found sufficient to effect a cure, yet in all those which were violent, Calomel was the uncus spei, and the patients were never considered out of danger until a ptyalism was excited. This always removed the cough, and the pain in the side, if it continued after blistering.

It likewise relieved the difficulty of breathing, and most of the unpleasant symptoms vanished at its touch. But it was necessary to give it in as large doses, as the patient could conveniently bear, internally, and likewise to apply it, liberally externally; in order to obtain its effects as speedily as possible, on account of the rapidity with which the disease runs its course.

Tonicks and Stimulents were indispensable remedies
in completing the cure, as the debility which ensued
was often the most alarming, and sometimes the more
dangerous stage of the disease. Wine and brandy were
used very freely, and with the effect of raising the
little trembling pulse, making it more full and regular;
relieving the thirst, and supporting the sink-
-ing powers of life, untill the more permanent
Stimuli should have time to act. An infusion of
guaiac, was given in many cases with advantage;
-ge; it assisted in restoring the appetite, and
preparing the stomach for the reception of a
nourishing diet; which was always essential.
The Peruvian bark and Chalybeates, in combi-
-nation with the spices, were given with the
happiest effects.

